

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025109**Date Inspected:** 14-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006	Component:	OBG Components				

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly Area

Caltrans and ABF have agreed to conduct visual and magnetic particle (MT) inspections of welds as part of a special joint re-inspection program. In response to ZPMC NDT Inspection Notification Sheets (NWIT) #09473, #09480 for magnetic particle testing (MT) inspection of the following:

This QA Inspector performed random visual testing (VT) and then MT of approximately 15% of the area previously tested and accepted by ABF Quality Control personnel. This QA Inspector generated an MT report for this date and provided a turnover to dayshift personnel for tracking of these welds. The members were identified as follows:

OBG Segment 14W, SEG3020K. The weld designations reviewed were: 325, 326, 337, 341, 343, 344, 354. No apparent MT indications were observed. However, weld number SEG3020K-325 was visually unacceptable due to the bottom plate I-rib cope hole was shaped to a sharp angle and had a rough surface. See photo below of cope shaped to a sharp angle and displaying rough surface. MT was not performed on weld number SEG3020K-325.

Weld joints SEG3020K-327, 330, 331, 334, 336, 338, 342, 347, 350, 352, 357, 358 were also listed on NWIT's #9473, #09480, but were rejected by ABF inspectors due to indications observed. Weld joints SEG3020K-355, 356, 359, 360 were also listed on NWIT's #9473, #09480, but were rejected by ABF inspectors due to water

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present, making MT impossible. Weld joints SEG3020K-327, 330, 331, 334, 336, 338, 342, 347, 350, 352, 357, 358, 355, 356, 359, 360 were not reviewed by this QA Inspector.

During random observations of the fabrication of OBG Segment 14W, this QA Inspector discovered the following issues:

Issue 1

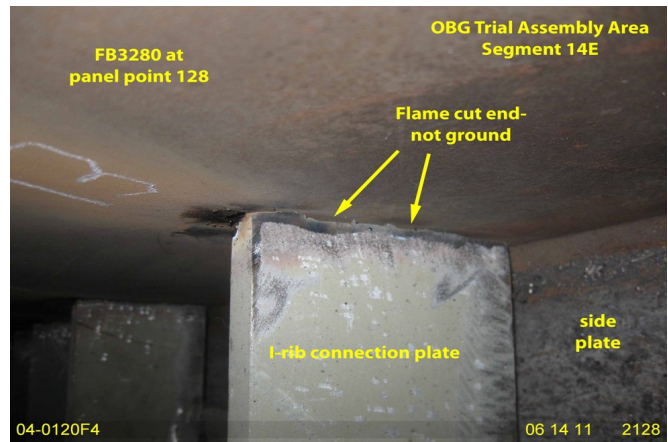
Non compliant joint preparation was performed to flame cut edges prior to tack welding. ZPMC welding personnel performed SMAW tack welding of flame cut ends of RS3242A to east side of FB3280. The faying edges of these stiffeners have not been properly ground prior to fit up. This condition exists at 25 locations.

Issue 2

The side plate I-ribs welded to the west side of FB3285 identified as RS3242B~AY, has been coped to fit over connection plate identified as X3744H. The cope has been freehand thermal cut. The cut edges do not appear to meet the requirements of AWS D.5 2002. This condition exists at 25 locations.

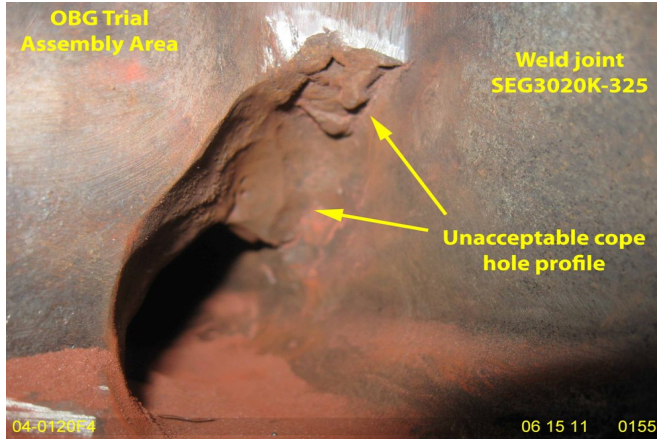
This QA Inspector notified ABF CWI Wang Jun and ZPMC QC Xie Ming Feng and generated an Incident Report concerning the above noted issues. See photos below and that Incident Report for more information.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer